

claims.

In the previous Office Action, the claims were rejected as obvious over Tipton et al (US Patent 4,594,378).

Applicants wish to add additional comments to the Response to Final Rejection submitted on December 23, 2002. In particular, Applicants point out that all claims are now directed to gear oil compositions. Additionally, the gear oil compositions are the combination of ingredients which when formulated into a lubricating composition have a shear loss of less than 15% in the 20 hour taper bearing test. Applicants have included a print out from the Southwest Research Institute regarding the Taper Roller Bearing Shear Test. Applicants note that this test is more severe than earlier shear tests such as the Orbahn or the Sonic shear tests. The taper bearing shear test is used to differentiate the shear stability of polymers. Applicants have discovered a combination of ingredients which can provide a shear loss of less than 15% in this test.

The gear oil compositions as presently claimed require that component (A) is (a) a polyalkylene, terpolymer of ethylene, propylene and a diene monomer mixtures thereof (claims 1 and 13) or (b) a polyalkylene or derivative thereof, an ethylene alpha-olefin copolymer, and ethylene propylene polymer or mixtures thereof (claim 31). Component (A) is present in an amount from about 15% to about 40% by weight of the gear oil composition.

Tipton et al relates to polymer composition which are useful as additives in transmission fluids and hydraulic fluids. Tipton et al teaches that these components have improved shear stability while maintaining desired high and low temperature viscosity characteristics. Tipton et al does not teach or suggest the specific combination of claimed components in their required quantities as currently claimed. Tipton et al does not teach the presence of Applicants' component (A) in an amount of about 15 to about 40%.

Tipton et al contains six examples. Examples a, b and c are directed to concentrate compositions which do not contain a major amount of a mineral oil. Examples d, e, and f have 100 neutral mineral oils in amounts greater than 88% by weight, however, these examples contain a maximum of 6.52% polyisobutylene ( $M_n = 1400$ ). None of the examples of Tipton et al show usage levels of polyisobutylene of about 15 to about 40% as required by Applicants' claims.

Tipton et al does not contain disclosure that would lead one of ordinary skill in the art to use the components of Tipton et al in a gear oil composition. Tipton et al teaches automatic transmission fluids and hydraulic fluids. There is no indication that the fluids used in Tipton et al would be useful in the environment of a gear oil. Comments regarding gear oils were previously submitted in Applicants prior response. (See response December 23, 2002.)

Further, Tipton et al does not teach or suggest the quantity of materials as currently claimed. Therefore, Applicants submit that Tipton et al does not render their claims obvious.

In the event any issues remain in the prosecution of this application, Applicants request the Examiner call the undersigned attorney to expedite allowance of the claims. If any additional fees are required for the filing of these papers, Applicants request the Commissioner to charge those fees to deposit account #18-0988.

Respectfully submitted,  
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